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TO: Bellevue Transportation Commission

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SUBJECT: Downtown Transportation Plan Update - Transit

INTRODUCTION

The update to the Downtown Transportation Plan will address mobility issues and challenges and support Downtown growth and urban livability looking out to 2030.

On December 13, 2012, the Downtown mobility topic will be transit. Staff will review Downtown Subarea Plan transit policies and projects, existing Downtown transit service and the forecast transit demand for 2030, plus the planned scope of the transit work. This background discussion will lead to a transit needs assessment and preliminary recommendations that staff will present in early 2013.

DOWNTOWN TRANSIT SERVICE

Downtown Subarea Plan Transit Policies and Projects

In the Downtown Subarea Plan (2004) are a number of transit-related policies and projects that provide direction for Bellevue to work with transit service providers and to invest capital resources to enhance the transit system to better serve the growing demand in Downtown Bellevue. Two stated goals are fundamental to the City's approach to address overall Downtown transportation and circulation:

- To provide an accessible transportation network for motor vehicle circulation, public transportation, high occupancy vehicles, pedestrian circulation, bicycle circulation, and integrated parking.
- To identify the road and transit improvements needed to implement the city's vision for Downtown Bellevue as a dense, mixed-use urban center.

The Downtown Subarea Plan anticipated a transit system in 2020 that would provide double the transit service from 2004, experience quadruple the transit ridership and include a high-capacity transit component, which at that time had not been determined to be East Link light rail that would serve Bellevue. Between 2004 and 2010 (the base year for the Downtown

Transportation Plan Update) daily transit ridership had already doubled, increasing from about 7,000 daily riders to about 14,000.

In terms of regional and local transit policy, the Downtown Subarea Plan acknowledges that the City must work with transit agencies to achieve the transit service needed to support Downtown growth and recognizes the opportunities for partnership and cooperation. Downtown Subarea Plan transit policy is included in this memo as Attachment 1.

The Downtown Subarea Plan identifies a number of transit facilities and services that would improve transit access. Attachment 2 shows the status of the adopted transit projects that support Downtown Bellevue mobility.

Community Involvement Summary

Summarized in the Transportation Issues Scoping Report (January 2012) are the issues raised by the community regarding their experience and expectation regarding Downtown transit service. The report acknowledges that while other agencies provide the transit service, the City of Bellevue manages the rights-of-way, traffic signals and sidewalks that support the transit system and its riders. Important issues for transit rider mobility include transit speed and reliability, pedestrian and bicycle access to transit stops, and Downtown access…each described more fully as follows:

- Transit Speed and Reliability: Two situations were highlighted - one is when a bus gets stuck in traffic or has to wait through a full signal cycle at an intersection, the passengers are delayed; and the other is delay caused by the loading and unloading of bus passengers and the on-board fare payment system that seems to slow things down.
- Pedestrian and Bicycle Access: Transit passenger information and facilities – including bicycle parking - at bus stops were mentioned as being lacking in many Downtown locations.
- Downtown Access: Three issues are identified in this category: integration of bus service with future East Link light rail stations; the geographic coverage of transit service Downtown; and transit access between Downtown and neighborhoods and commercial areas east of I-405.

Measures of Effectiveness – Transit Rider Mobility

Measures of effectiveness (MOEs) will be useful in the Downtown Transportation Plan Update to help identify and prioritize project ideas that address mobility issues. Transit rider mobility measures can describe the performance of projects and can identify trade-offs among projects being considered. Transit project performance is “personalized” to measure the benefit to the transit rider, described as follows and shown in Figure 1:

Intersection or Location

- Bus stop locations that provide preferred components. The components preferred at each bus stop location will vary depending on the bus stop use level and function. Use level is determined by the number of daily boardings, and function considers whether the stop is an important origin, destination and/or transfer point. Components such as shelter, seating, and real-time information, are appropriate for high-volume stops, and additional components such as wayfinding and bicycle parking are especially appropriate for transfer points.
- Light rail stations that provide preferred components. Light rail stations will have components superior to those provided at bus stops, due to the anticipated volume of boardings, but the common features will include passenger access, wayfinding, comfort and information. Bicycle access and parking will be a significant design feature.

Corridor (Transit route)

- Travel time in seconds per transit rider per mile of travel corridor. This measure is used to evaluate the effectiveness of various transit speed and reliability treatments.

Downtown Subarea:

- Percent of total daily person trip ends within a 5-minte walk of 15-minute transit service.
- Percent of total daily person trip ends.

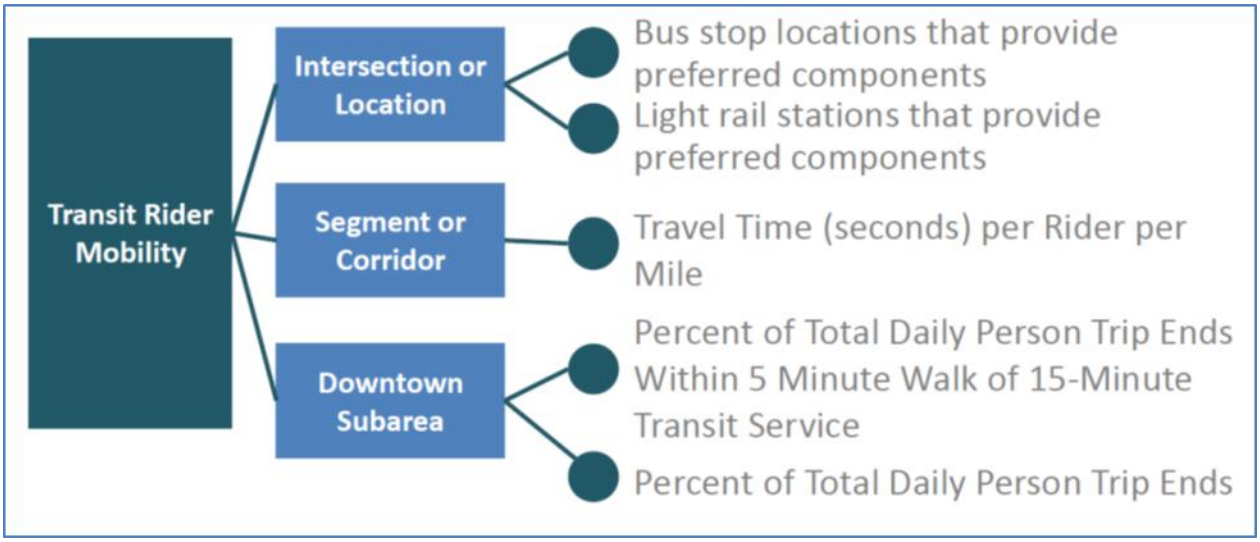

Figure 1: Measures of Effectiveness for Transit Riders

Downtown 2030 Travel Demand

Land use forecasts for 2030, show significant increases in Downtown population and employment (Table 1) which results in growth in travel demand for all modes that shows some interesting results (Table 2)

Table 1. Forecast population and employment growth in Downtown Bellevue

	1990	2000	2010	2030	2010/2030 Growth
Employment	22,257	34,042	**42,525**	**70,300**	**+27,775**
Population	1,182	2,588	**7,147**	**19,000**	**+11,853**

Table 2. Forecast daily travel demand growth in Downtown Bellevue, by mode

	2010	2030	Growth
Auto	345,342	543,933	198,591/58%
Pedestrian	33,590	84,571	50,981/152%
Transit	11,211	62,042	50,831/453%
TOTAL	**390,144**	**690,547**	**300,403/77%**

Auto demand increases at a slow rate of 2% per year

Note the significant increase in the number of pedestrians

Note that transit demand increases by a larger percentage than for any other mode

Table 3 provides details on trip making in Downtown Bellevue, in aggregate and by purpose. Note specifically the transit component changes, in terms of absolute numbers and the percent of the total. Other notable facts include:

- In 2010, transit trips are 3% of the total daily person trips in Downtown Bellevue; that percentage rises to 9 percent of daily trips in 2030 while the absolute numbers grow from approximately 11,000 to 62,000
- The share of overall travel demand for auto person trips decreases by 10%
- Of the projected 107,000 Home-Based Work trips in 2030, transit has the largest increase in mode share
- The auto share decreases across all categories
- Pedestrians make up the largest percentage increase in Non-Home Based trips
- In percentage terms the increase is about the same in Home-Based Work trips and Home-Based Other trips. Although the transit share of Home-Based Other and Non-Home Based trips increases significantly, the overall number is still relatively small.

Table 3. Downtown Bellevue Trip Patterns Analysis Summary

All Trips	Total						
	2010		2030		Change		
Mode	Trips	Percent	Trips	Percent	Absolute	Diff in %	Growth
Transit Riders	11,211	3%	62,042	9%	50,831	6%	453%
Pedestrians	33,590	9%	84,571	12%	50,981	4%	152%
Auto Persons	345,342	89%	543,933	79%	198,591	-10%	58%
Total	390,144		690,547		300,403		77%

Trips by Purpose	Total						
	2010		2030		Change		
Mode	Trips	Percent	Trips	Percent	Absolute	Diff in %	Growth
Home-Based Work Trips							
Transit Riders	6,504	11%	36,982	35%	30,478	23%	469%
Pedestrians	533	1%	728	1%	195	0%	37%
Auto Persons	50,261	88%	69,041	65%	18,780	-23%	37%
Total	**57,298**		**106,751**		**49,453**		**86%**
Home-Based Other Trips							
Transit Riders	2,450	1%	16,675	5%	14,226	4%	581%
Pedestrians	6,754	4%	25,578	8%	18,824	4%	279%
Auto Persons	175,998	95%	298,245	88%	122,247	-7%	69%
Total	**185,201**		**340,498**		**155,297**		**84%**
Non-Home-Based Trips							
Transit Riders	2,258	2%	8,385	3%	6,127	2%	271%
Pedestrians	26,303	18%	58,265	24%	31,962	6%	122%
Auto Persons	119,084	81%	176,648	73%	57,564	-8%	48%
Total	**147,645**		**243,298**		**95,653**		**65%**

Scope of Downtown Transportation Plan Update – Transit Mobility

The scope of the work for the transit mobility component of the Downtown Transportation Plan Update can be summarized in four categories with some details below:

- **Coverage**
  - Transit routing and stop location to serve growing Downtown neighborhoods and employment centers
    - Population and employment within a 5-minute walk of high-frequency transit service
  - Transit service connections between Downtown and the Medical Institution District east of I-405
  - Visitor destinations such as shopping and civic/cultural and recreation facilities
- **Speed and Reliability**
  - Transit delay and rider travel time
  - Best practices for addressing the type of transit delay anticipated
    - Signalized intersections: transit signal priority
    - Roadway segments/corridors: peak-hour transit lanes
- **Capacity**
  - Bellevue Transit Center capacity
    - Passenger waiting space
    - Passenger transfer and circulation space
    - Transit vehicle circulation capacity
  - Transit demand to Downtown Bellevue from the region and other Bellevue neighborhoods – what does the transit system look like that will serve the 2030 demand
  - Transit layover space
- **Comfort/Access/Information**
  - Preferred components for transit stops - best practices in passenger accommodation:
    - Shelters with amenities
    - Passenger information – maps, electronic
    - Wayfinding to/from neighborhood destinations
    - Sidewalks and other access – crosswalks, mid-block crossings
    - Bicycle facilities: on-street bicycling facilities and wayfinding, short-term and long-term bicycle parking

NEXT STEPS

At the next scheduled Commission meeting on January 10, 2013 staff will continue the discussion of Downtown transit service. Transit service analysis and preliminary recommendations will be presented and discussed.

ATTACHMENT 1

Downtown Subarea Plan

Regional and Local Transit

The 2020 growth forecast for Downtown Bellevue shows a significant increase in transit demand. To meet this demand, a doubling of overall transit frequency will be required to ensure sufficient local and regional service for workers, residents, and visitors. This increase

in transit service will result in a quadrupling of transit ridership. High capacity transit is a key component of the long-range vision for Downtown. Achieving high levels of transit ridership to

Downtown Bellevue will also depend on a significant expansion of service for local and regional routes and Park and Ride capacity for trips that originate outside the city.

These improvements will seek to provide a competitive trip frequency and travel time advantage, as well as locate parking in areas where a significant increase in ridership is expected to originate.

Dedicated transit lanes on 108th Avenue NE and the 106th/108th one-way couplet would improve transit service and schedule reliability. Revisions to simplify and speed service within Downtown are recommended to achieve the large increase in transit trips internal to Downtown – 30 percent of the total ridership increase. To maintain Downtown mobility, transit should be targeted to connect the Bellevue Transit Center, major retail and office areas, and activity areas adjacent to Downtown such as Overlake Hospital.

POLICY S-DT-130. Encourage transit service providers to improve transit connections between Downtown and the city's neighborhoods.

POLICY S-DT-131. Work with transit providers to significantly expand transit service, including express bus transit, to Downtown Bellevue to accommodate anticipated increases in ridership.

POLICY S-DT-132. Explore ways of providing the most effective transportation services and marketing programs for trips between major retail, office, and transit facilities Downtown, as well as activity areas on the edge of Downtown such as Overlake Hospital.

POLICY S-DT-133. Encourage transit service providers to improve transit connections between Downtown Bellevue and other designated urban centers.

POLICY S-DT-134. Support transit ridership to Downtown Bellevue by encouraging the regional transit providers to expand Park-and-Ride capacity outside of Bellevue.

POLICY S-DT-135. Provide space within or near Downtown for bus layovers and other transit facilities needed to support projected levels of transit service and ridership. Layover space and other facilities, whether developed within the right-of-way or off-street, must be located and developed in a manner that minimizes impacts on residential areas, provides an active pedestrian environment and is consistent with the district character direction in this Plan.

POLICY S-DT-136. Encourage convenient and frequent transit services and provide incentives for attractive waiting areas in Downtown in recognition that transit extends the range of the pedestrian.

POLICY S-DT-137. Coordinate with transit providers to enhance information and incentives available to transit riders and potential transit riders to encourage and facilitate transit use.

POLICY S-DT-138. Work with Sound Transit and other regional partners to develop a High Capacity Transit system that connects Downtown Bellevue to other key activity centers.

ATTACHMENT 2

PROJECT/POLICY	DESCRIPTION	STATUS (February 2012)
TRANSIT		
Project #401	**Downtown** Construct the transit facilities within Downtown needed to support the projected level of transit service and ridership consistent with the Downtown Implementation Plan.	**Not complete. Ongoing analysis of East Link through the collaborative design process in 2012-13. Downtown Transportation Plan Update and Transit Master Plan Update include evaluation of future transit needs to accommodate growth.**
Project #402	**NE 6th St between 112th Ave NE and I-405** Construct a new transit center.	**Complete.**
Project #403	**Downtown** Provide a transit circulator for access to restaurants, shopping, parking and places of employment throughout Downtown and possibly to adjacent activity areas.	**Not complete. Implementation plan developed with King County Metro. Downtown Transportation Plan Update will consider alternative means of providing frequent and reliable transit coverage for Downtown and Hospital District.**
Project #404	**Region** Construct new park-and-ride lots specifically aimed at providing transit service to Downtown Bellevue.	**Partially complete. Ongoing regional effort.**
Project #405	**Downtown** Improve transit stop facilities and amenities for transit riders.	**Partially complete. Ongoing interjurisdictional effort.**
Project #406	**108th Ave NE** Add a northbound contraflow curb lane for buses only between NE 4th and NE 8th.	**Not complete. This was a component of the 106th - 108th Avenues NE one-way couplet (Project # 206) which was analyzed and determined to be not viable.**
Project #407	**108th Ave NE** Add a southbound curb lane for buses only between NE 10th and Main.	**Not complete.**